CHALITS, A. Ye.; Videnty, and Buffuscomplete - interact states by the interferential microsection, toki. AN Side 161 n. 5: 1146-1148 aprint.

1. Hoskovskiy technologymentiy institut legkay promyshleasesti. Submitter October 1, 194.

L 31980-66 EWT(m)/T/EWP(1) IJP(c) WWARM

ACC NR: AR6011875 SOURCE CODE: UR/0081/65/000/016/5009/5010

AUTHOR: Chalykh, A. Ye.; Vasenin, R. M.

ORG:

no. p-

TITLE: Interference micromethod of investigating diffusion in a polymer-solvent

system

SOURCE: Ref. zh. Khimiya, Abs. 16875

TOPIC TAGS: polymer, polyvinyl alcohol, diffusion, interferometer, multibeam interferometer

ABSTRACT: Based on the phenomenon of multibeam interference from two surfaces of a plate, a device (interferometer) has been designed for studying the diffusion kinetics of solvents in transparent polymers? The device consists of a diffusion cell, a light source, an optical system, and a microscope. The original paper includes an overall view of the device and a cutaway view of its optical system and diffusion cell. The procedure is explained on the basis of the diffusion of water in polyvinyl alcohol; an interferogram of the process is inclused. It is shown that in the system polyvinyl alcohol-water the dependence of the coefficient of interdiffusion on the concentration of the water is in the form of a curve with a maximum. Yu.

Kercha. [Translation of abstract]

Card 1/1 2/

EWT(m)/EWP(j)/T Wat INTAETPH SOURCE CODE: UR/0020/65/165/002/0347/0350 ACC NR: AP5028282 (À) AUTHOR: Gromov, V. K.; Vasenin, R. M.; Chalykh, A. Ye.; Voyutskiy, S. S. ORG: Moscow Institute of Chemical Precision Technology im. M. V. Lomonosov (Moskovskiy institut tonkoy khimicheskoy tekhnologii) TITLE: Effect of the molecular weight of hydrocarbons and their diffusion in polymers SOURCE: AN SSSR. Doklady, v. 165, no. 2, 1965, 347-350 TOPIC TAGS: hydrocarbon, molecular weight, polymer, chemical reaction ABSTRACT: The diffusion coefficient (D)of hydrocarbons in polymers was studied by changing their molecular weight for 1-2 orders. The following systems were studied (polymer, hydrocarbon(s), temperature); polyisobutylene'(I), octane, or dodecane, or hexadecane, 20-120C; I, paraffin (nolecular weight~325), 60-160C; I, ceresine, 100-1300; I, polyethylene (molecular weight~2000 or~5000), 100-1300; atactic polypropylene (II), paraffin (molecular weight ~325), 60-1000; II, ceresine, 100-000, and II, polyethylene (molecular weight~2000 or~5000), 100-130C. In the systems studied, D depended on the molecular weightof hydrocarbons, according to the equation  $D=KM^{-\gamma}$ , where K and  $\gamma$  were constant and M was the molecular weight;  $\gamma$  depended on the concentration of the hydrocarbon in a system and on the nature of the polymer. At 100-20C, Ywas ~3 or ~ 2 for I or II, respectively. For polyethylenes, Ywas ~ Card 1/2UDG: 678.01:53

1, 31107-66

ACC NR. AP5028282

2.5 and ~1.5 at 120 and 130C, respectively. In this case the temperature dependence of %, was probably related to the concentration of the areas of ordered crystals in the polyethylenes. At higher temperatures, the mobility of chains increased and Y became smaller. At 130C, holding other factors constant, the value of % increased with the polymers: polyethylene < atactic propylene < polyisobutylene. At 120C, D for a hydrocarbon of a molecular weight of 2.104 was ~6.10-12 or ~2.10 cm²/sec. In I or II, respectively. With an increase of hydrocarbon concentration in a system, the activation energy of the diffusion process decreased. The paper was presented by Academician S. S. Medvedev, 13 Apr. 65. Orig. art. has: 4 figs.

SUB CODE: 20,07/ SUBM DATE: 09Apr65/ ORIG REF: 009/ OTH REF: 007

 $\frac{Card}{2/2} \frac{2/2}{2} \frac{2}{2}$ 

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OROMON, V.K.; CHAIYKH, A.Ye.; VISERIN, B.K.; VOYVUSAIT, S.S.

Diffusion of paraffla in suturated curtocasin polymers. Trocrom. soed. 7 no.5:202-207 My 165.

1. Neskovskiy institut tenkey khirjoheskey tekhnologil (nor) M.V. Lomanos ova i Meskevskiy tekhnologishiy imatitus legacy promyshlennosta.

L 38850-66 EWP(j)/EWI(m)/T RM

ACC NR: AR6011874

SOURCE CODE: UR/0081/65/000/016/S009/S009

AUTHOR: Chalykh, A. Ye.; Vasenin, R. M.

TITIE: Optical methods of studying diffusion

SOURCE: Ref. zh. Khimiya, Abs. 16874

REF SOURCE: Nauchn. tr. Mosk. tekhnol. in-t legkoy prom-sti, vyp. 30, 1964, 192-199

TOPIC TAGS: fluid diffusion, optic method, optic interference, colorimetry, refractometry

ABSTRACT: Optical methods suitable for studying diffusion in the polymer - solvent system were studied over a wide concentration range. On the basis of the physical processes underlying these methods, the latter were divided into three groups: refractometric, interference, and colorimetric methods. The advantages and disadvantages of the individual methods are shown by comparison. Optical sheemes due to Lamm, Staube and Labhart, characterizing the various refractometric methods, and also Longsworth's scheme, characterizing one of the interference methods, are shown and described. Bibliography of 30 titles. Yu. Kercha. [Translation of abstract]

SUB CODE: 20

Card 1/1

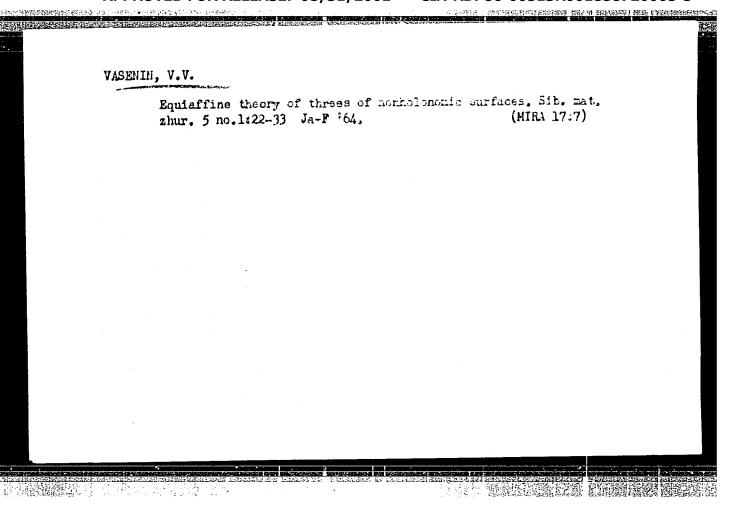
CHALYKH, A.Ye., aspirant; VASENIN, R.M., kand. tekhn. nauk, dotse: t

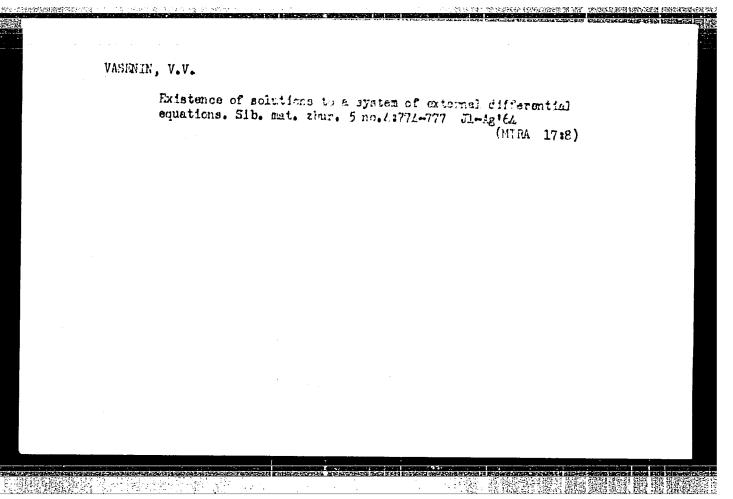
Optical methods for the study of diffusion. Nauch. trudy MILP no.30:192-199 164.

Interference micromethod for the study of diffusion in the system polymer-solvent. Ibid.:200-206

(MTRA 18:6)

1. Kafedra fizicheskoy i kolloidnoy khimii Moskovskogo tekhnologicheskogo instituta legkoy promyshlennosti.





VASENINA, M.Ya.

PA - 1518 CARD 1. NOVIKOV, I.I., SOLOVEV, A.N., CHABACHPAŠEVA, E.M., GRUZDEV, V.A., SUBJECT

AUTHOR PRIDANZEV, A.I., VASENINA, M.JA.

The Heat Transfer and the Thermophysical Properties of Fused TITLE

Alkali Metals.

Atomnaja Energija, 1, fasc. 4, 92-106 (1956) PERIODICAL

Issued: 19.10.1956

From 1950 to 1955 the authors carried out experimental research work concerning the thermophysical parameters and the heat transfer of fused metals. The present article deals with the most important results obtained in the course of this

Heat transfer: The experimental apparatus consisted of a heat commutator, cooler, pump, consumption meter, and registering valve. The individual components and their functions are discussed. In a series of experiments the heat transfer between liquid sodium and the copper heating surface is investigated. In the course of a second series of experiments the inner surface of the same heat commutator was coated with a nickel layer of about 10 / thickness. Experiments were carried out at a velocity of flow of the liquid sodium amounting to from 0,8 to 11 m/sec and at temperatures of from 140 to 340° C. On this occasion the dimenionless criteria characterizing heat transfer were modified within the following limits:

Re =  $1,5.10^4$  to  $2,1.10^5$ , Pr =  $(5 \text{ to } 9).10^{-3}$ , Pe = 100 to 1400. The viscosity of Na, K, Li and of a eutectic mixture of Na and K (25% Na +

**APPROVED FOR RELEASE: 08/31/2001** CIA-RDP86-00513R001858720005-5"

#### 

Atomnaja Energija, 1, fasc.4, 92-106 (1956) CARD 2 / 2 PA - 1518 75% K) was measured by the method of damped torsion oscillations of a small pail filled with the fused metal. The experiments, which were carried out under different conditions, yielded results which agreed well with one another and which are shown in diagrams. In the case of all metals investigated, Y ( = viscosity?) diminishes at first rapidly and later more slowly. The temperature conductivity of alkali metals: The metal is investigated in a vertical thin tube of stainless steel the lower end of which is closed by welding. The carrying out of experiments is discussed in detail on the basis of drawings. The temperature conductivity coefficient of K diminishes at first sharply and later more slowly as temperature rises. The temperature conductivity coefficient of Na grows from 100 to 1500, after which it decreases monotonously with a further increase of temperature, but the temperature conductivity coefficient of the alloy mentioned increases monotonously. The density of the fused alkali metals was measured in a simple manner and with sufficient accuracy by means of a body of known volume which was submerged in the liquid to be investigated. All measuring values are on a straight line with an accuracy of 0,4%. The density of Na and K decreases linearly with rising temperature.

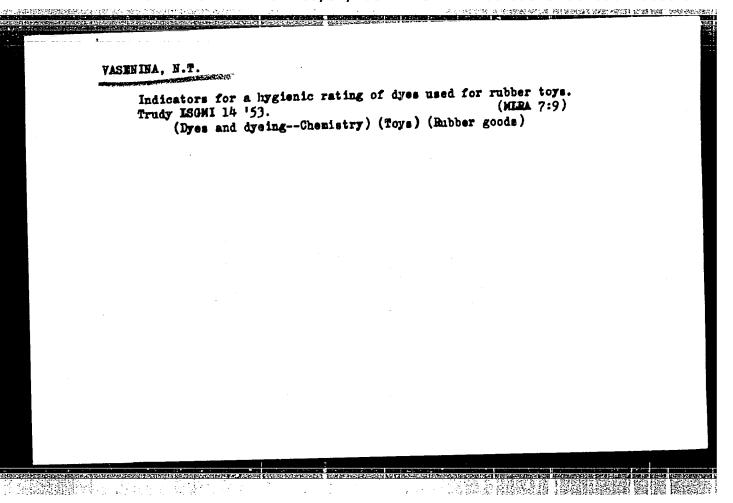
INSTITUTION:

FOMIN, G.Ya.; VASENINA, N.I., red.; ISHKOVA, A.K., red.; EL'KINA, E.M., tekhn. red.; GROMOV, A.S., tekhn. red.

[Work and wages in state commerce] Trud i zarabotnaia plata v gosudarstvenmoi torgovle; sbornik rukovodiashchikh materialov. Izd.2., perer. Pod red. N.I.Vasenina. Moskva, Gos. izd-vo torg. lit-ry, 1961. 335 p.

(Wages—Commerce)

(Wages—Commerce)



VASENINA, N. T.

Dissertation: "Hygienic Evaluation of Basic Pigments Used in the Manufacture of Rubber Toys." Leningrad Sanitary-Hygiene Medical Inst, Leningrad, 1953. Referativnyy Zhurnal-Khimiya, Moscow, No 7, Apr 54.

SO: SUM 284, 26 Nov 1954

AUSERINH M. M.I.

: USSR/Medicine Subject

AID P - 1410

Card 1/2

Pub. 37 - 7/23

Author

Vasenina, N. T., Kand. of Med. Sci.

Title

: Hygienic characteristic of some aniline dyes

used in the manufacture of toys

Periodical: Gig. i san., 1, 29-32, Ja 1955

Abstract

The purpose of this work, assigned by the Chief State Sanitary Inspector, USSR, is to decide if three aniline dyes applied on toys but not included in the list of authorized dyestuffs (Sanitary Regulations, 1953), are harmless. The results of the tests on white rats and chemical analyses described in this article are negative. The dyes in question are not recommended for coloring toys. Table.

5 ref., 1929-1951.

EYDLIN, Isaak Yakevlevich, kandidat tekhnicheskikh namk, detsent; MALYUTIN, V.H., retsenzent; KUL'CHUTSKIY, V.H., retsenzent; VASEBKO, A.V., A.V., redakter; VOROB'YEVA, N.H., redakter; KARASIK, B.F., tekhnicheskiy redakter.

[Paper-making and finishing machines] Bumagedelatel'nye etdelechnye mashiny. Meskva, Gašlesbumizdat, 1955. 303 p. (MLRA 9:5) (Papermaking machinery)

BARAHOV, Nikolay Aleksandrovich, inzh.; DOBROVOL'SKIY, Dmitriy Sorgeyevich, kand.tekhn.nauk, dots.; IVANOVA, KLavdiya Aleksandrovne, retsenzent; MALYUTIH, Vladimir Mikolayevich, retsenzent; VASMIKO, A.V., red.; SIDRL'NIKOVA, L.A., red.izd-va; SHITS, V.P., tekhn.red.

[Technology of papermaking] Tekhnologiia bumazhnogo proizvodstva.

Izd. 2-oe, perer. i dop. Monkva, Goslesbumizdat, 1957. 333 p.

(Paper industry)

(MIRA 11:5)

EYDLIN, Isaak Yakovlevich, dots, kand.tekhn.nauk; KOZULIN, N.A., retsenzent; KIOPOV, V.M., retsenzent; YASENKO, A.Y., red.; VOROB'YEVA, N.N., red.izd-wa; SHITS, V.P., tekhn.red.

[Papermaking and finishing machines] Bumagodelatel'nye i otdelochnye mashiny. Moskva, Goslesbumizdat, 1958. 484 p. (MIRA 11:6)

(Papermaking machinery)

SOLOMKO, Vasiliy Savvich; VASENKO, A.V., retsenzent; SERDYUKOV, M.P., retsenzent; SIMAKOVA, A.N., red.; KHIVRICH, Ye.D., red. izd-ve; SHIEKCVA, H.Ye., tekhm. red. [Woodpulp and paper industry in Finland]TSelliulozno-bumazhnaia promyshlennost' Finliandii. Moskva, Goslesbumizdat, 1962. 538 p. (MIRA 15:12) (Finland--Woodpulp industry) (Finland--Paper industry) 

> CIA-RDP86-00513R001858720005-5" APPROVED FOR RELEASE: 08/31/2001

DZHALILOV, Khanlar Ibragimovich, kend.ekon.nauk; VASENKO,A.V.,red.

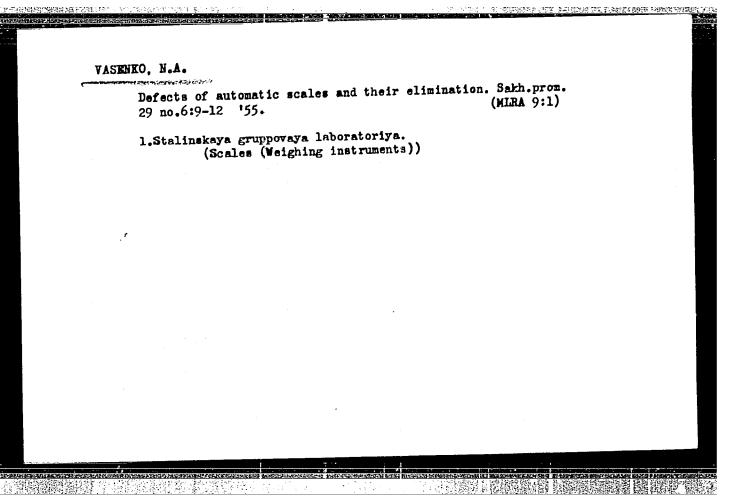
[Problems of the raw materials basis of the woodpulp industry]
Problemy syr'evoi bazy tselliulozno-bumazhnoi promyshlennosti.
Izd.2., perer. i dop. Moskva, Izd-vo "Lesnaia promyshlennost',"
1964. 258 p. (MIRA 17:5)

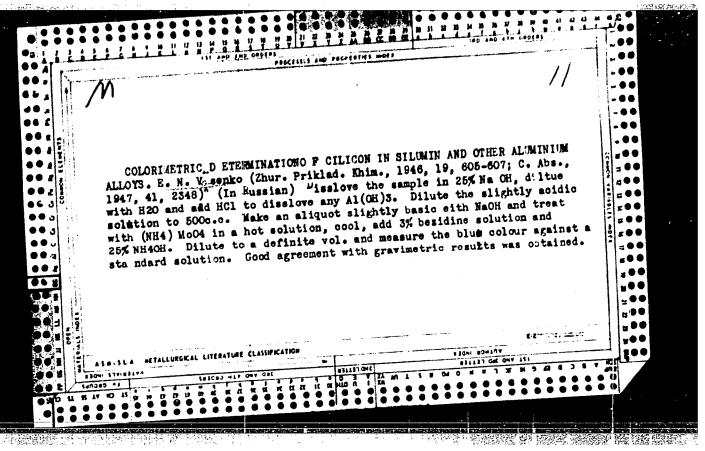
YAK-18F in flight. Kryl.rod. 12 no.7:21-23 Jl '61. (MIRA 14:6)
(Airplanea--Piloting)

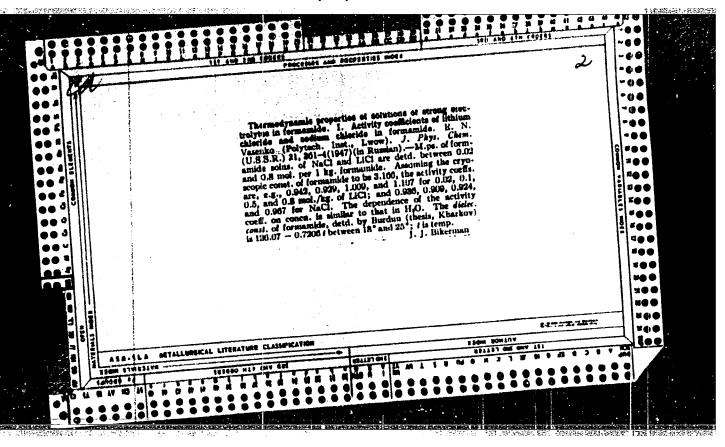
VASEYKO, I.Ya., general-mayor artillerii; KRASOVSKIY, L.V., polkovnik, red.; MURZAYEV, N.I., red.

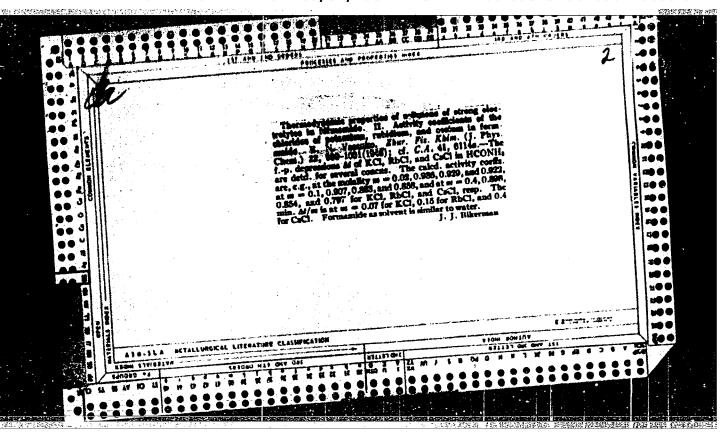
[Firing service; a collection of methodological recommendations and exercise on the firing service of ground artillery] Ognevaia sluzhba; sbornik metodicheskikh rekomendatsii i uprazhnenii po ognevoi sluzhbe nazemnoi artillerii. Moskva, Voenizdat, 1965. 214 p.

(MIRA 18:12)









VASENKO, Ye. N. 7	PRIKHOT'KO, A.F.		1
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, i	L'vov. Universytet		ļ
	Materialy I Vsescyuznogo soveshchaniya po spektroskopii. Molekulyarnaya spektroskopiya (Fapers of the 10th All- Conference on Spectroscopy. Vol. 1: Molecular Spectro [L'vor] Izd-vo L'vovskogo univ-ta, 1957. \$99 p. 4,000 printed. (Series: Its: Fizychnyy zbirnyk, vyp. 3/8/	Union	
	Additional Sponsoring Agency: Akademiya nauk SSSR, Komir spektroskopii. Ed.: Gazer, S.L.; Tech. Ed.: Saranyuk, Editorial Board: Landsherg, G.S., Academidan (Resp. Editorial Board: Landsherg, G.S., Academidan (Resp. Editorial Board: Landsherg, G.S., Academidal Resp. Editorial S.A. Doctor of Physical and Mathematical Science, Raylands, V.A. Doctor of Physical and Mathematical Sciences, Raylandsher, V.G., Candidate of Thysical and Mathematical Sciences, Raylandsher of Physical and Mathematical Sciences, Mility Candidate of Physical and Mathematical Sciences	ssiya po T.V.; 1., Decoased), tences, Sciences, siences, skiy, S.M., rakty, L.K., nichuk, V.S.	
**************************************	Card 1/30	•	
	Hazardy, T.M. 7 & Vontage		5
	Nazarov, I.N., L.A. Kazitsyna, and I.I. Zaretskaya. Determination of the Structure of Carbonyl Compounds From Absorption Spectra of Their 2,4-dinitrophenyl- hydrazones	100	
	Israilevich, Ye. A., D.N. Shigorin, et al. Absorption Spectra of Carbanions	185	
	Popoy, Ye. M. Infrared Spectre of Sono mediates	188	
		188	
	Bagratishvili, O.D., and D.N. Shigorin. Infrared Spectra and the Structure of Certain Aso Dyes and Their Hydrochlorides		
	Vasenko, Ya. N. Effect of the delegat	190	
	Amides	192	
	Card 13/30	:	
1	·		

507/48-22-9-31/40 Vasenko, Ye. N., Chernyavskaya, A. P., AUTHORS: Chernaya, N. V.

Infrared Spectra of Salt Solutions (Infrakrasnyye spektry TITLE:

solevykh rastvorov)

Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1958, PERIODICAL:

Vol 22, Nr 9, pp 1125 - 1125 (USSR)

This is an investigation of the influence of ions ABSTRACT:

on the structure of fluids, which is determined by inter-

molecular hydrogen bindings. The authors used the vibration spectrum of the saturated solutions of

potassium nitrate and of potassium bromide in formamide as a vehicle of their investigation, as the spectrum of formamide is well studied. Moreover, formamide

exhibits a considerable similarity to water, as the nature of its intermolecular bindings leads to the

formation of a spatial lattice structure spreading through

the whole fluid. The C-N bond of the formamide was chosen for the reason that its position is noticeably altered at a formation or a rupture of the hydrogen

Card 1/2

Infrared Spectra of Salt Solutions

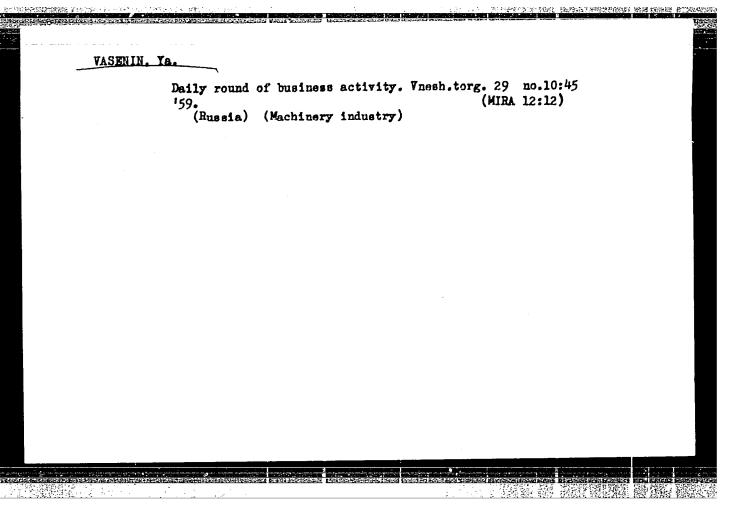
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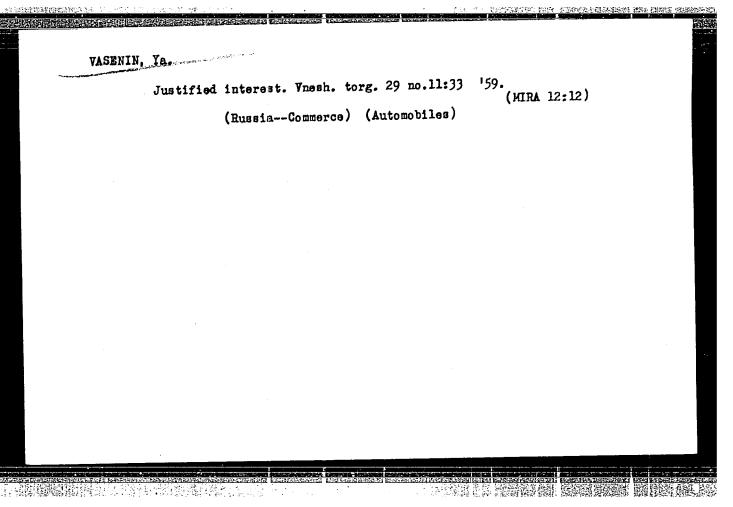
bindings in which the amino group as well as the carbonyl group participate (Fig 1). It is besides rather intensive and is comparatively far removed from the others. The absorption spectrum was recorded of saturated potassium nitrate solution in formamide in the range of 1200 - 1500 cm<sup>-1</sup> and of saturated potassium bromide solution in formamide in the same spectral region with a **TKB**  $\mathcal{I}$  -11 spectrometer with a common-salt prism. The absorption spectra which were recorded for the sake of comparison showed in the investigated range a noticeable absorption which is not characteristic for pure water (with potassium bromide - two bands). The origin of this absorption is at present under investigation as well as the dependence of the absorption spectra upon the concentration in the region already investigated and in the frequency range of the N-H, C=0 in formamide and O-H in water. There are 2 references, 2 of which are Soviet.

ASSOCIATION:

L'vovskiy politekhnicheskiy institut (L'vov Polytechnical

Card 2/2 Institute)





VASENKO, YE.	N		PA 67/49T11
		USSR/Chemistry - Thermodynamic Properties in formaldehyde with respect to decreases freezing points). Calculates coefficients vation for these three salts. Attributes havior of the nitrate ion in contrast to th ions to the normalization of structurally liquids such as water and formaldehyde. Si l Dec 48.	USSR/Chemistry - Thermodynamic Properties  Electrolytes  "The Thermodynamic Properties of Solution. Electrolytes in Formaldehyde: III, the Coof Activation of Potassium Nitrate, Potassiude, and Potassium Iodide, "Ye. N. Vasenlof Physicochem, Polytech Inst, L'vov, 3 pl  "Zhur Fiz Khim" Vol XXIII, No 8  Gives the formula expressing the relations tween the functions j/m2 and m2 (for use solutions of 0.01-1.1 potassium nitrate as concentrations of potassium bromide, and Kl
	67/h9T11	ases in their lents of acti- utes the be- to the halide ally complex s. Submitted	of Solutions of Strong III, the Coefficients rate, Potassium Bro- e. N. Vasenko, Lab L'vov, 3 pp  8 pe relationship be- ge (for use in studying m nitrate and 0.025-0.8 cmide and KI

VASENKO, E. N.

Chemical Abstracts
Vol. 48 No. 5
Mar. 10, 1954
General and Physical Chemistry

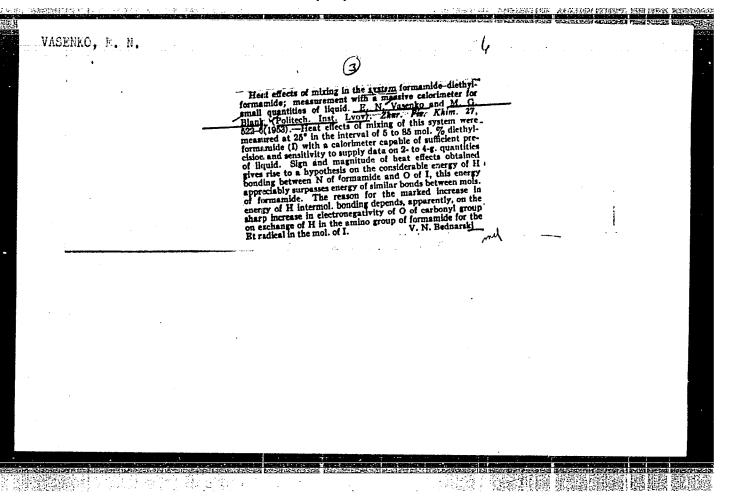
Specific gravity and viscosity of the formamide-diethylformamide system. E. N. Veenko and S. M. Dubrovskol
(Polytech Inst. Agr. Inst., Lvov). Zhur. Pis. Khim.
27, 281-4(1953); cl. C.A. 41, 61146(1947).—The viscosity
and sp. gr. of mixts. of HCONH<sub>2</sub>(1) and HCONRt<sub>2</sub>(II) in 14
different conens. between 0 and 100 mole % of HCONH<sub>3</sub>
were detd. by means of pycnometers and a closed-capillary
visconneter at the temps. 0, 25, 50, and 75° in a thermostat
whose temp. was const. within 0.02°. The tabulated results indicate much assocn. of mols.; it is suggested that I
and II are cc. mbined in various ways through H bonds.

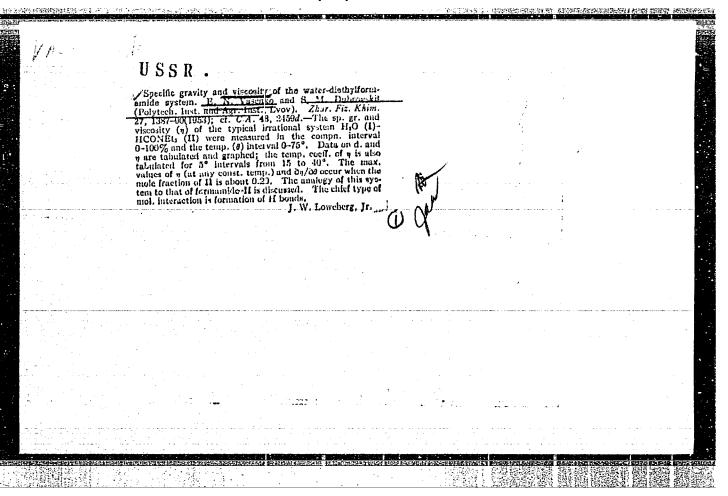
I. W. Loweberg, Jr.

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## CIA-RDP86-00513R001858720005-5





USSR/ Physics - Spectral analysis

Card 1/1

Var. Mist

Pub. 43 - 49/62

The state of the s

Authors

Vasenko, Ye. N.

Title

Infrared spectra and association in solutions

Periodical :

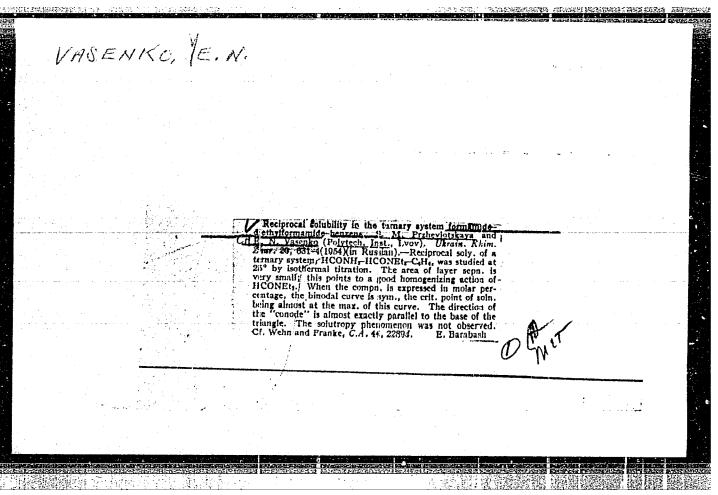
Izv. AN SSSR. Ser. fiz. 18/6, 725-726, Nov-Dec 1954

Abstract

The importance of infrared absorption spectra is explained in determining the state of molecules in associated liquids in ternary solutions in the presence of a third component (homogenizer). The characteristics of such spectra in case of reaction between molecules, deformed oscillations of equimolecular solution, and associations by means of H-bonds, are described. Some results of associations in various solutions, as obtained by means of infrared absorption spectra, are listed. Five references: 2 German, 1 Indian and 2 English (1934-1952). Graph.

Institution: The Polytechnicum, L'vov

Submitted :



# "APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001858720005-5

VASENNU

Chemistry - Physical chemistry

Card 1/1

Pub. 116 - 8/30

Authors

Vasenko, Ye. N., and Blank, M. G.

Title

Mutual solubility in a ternary formamide-acetone-benzene system at 25°

Periodical :

Ukr. khim. zhur. 21/3, 327-330, June 1955

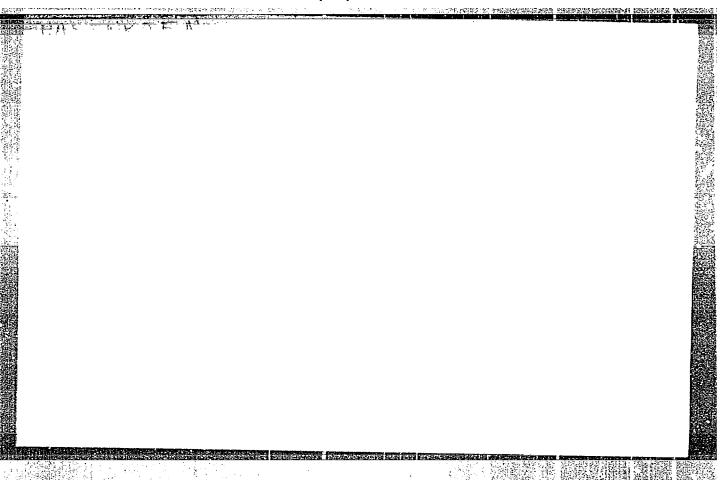
Abstract

Experiments were conducted with a ternary formamide-acetone-benzene system in which formamide is the high-association component to determine the mutual solubility of the three components. A great analogy was revealed between the system investigated and the ethyleneglycol-acetone-benzene system. At 30° the acetone was found to be a better homogenizer for the formatidebenzene system than for water-benzene. The components of the ternary critical solution point were determined by the index of refraction and density of the solutions. At a low formamide content in the ternary solutions the acetone showed a tendency toward the benzene phase. Five references: 3 USSR and 2 English (1930-1954). Tables; graphs.

Institution: Polytechnical Inst., Lab. of Phys. Chem., L'vov

Submitted : November 20, 1954

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858720005-5"



APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858720005-5"

VASENKO, YE.N.

USSR/Physical Chemistry - Surface Phenomena. Adsorption.

B-13

Chromatography. Ion Exchange

Abs Jour : Referat Zhur - Khimiya, No 2, 1957, 3984

Author :

: Vetrova G.A., Vasenko Ye.N.

Inst Title : Lvov Polytechnic Institute : Surface Tension in the Systems: Diethyl Formamide -

Water, Formamide - Water, Diethyl Formemide - Formumide.

Orig Pub

: Nauch- zap. L'vovsk. politekhn. in-ta, 1956, No 22, 3-9

Abstract

: By the method of maximum bubble pressure a determination was made of surface tension of the following solutions:
a) diethyl formanide (1)- water, b) formanide (II) - water, c) diethyl formanide - formanide, at a temperature t = 15-50°. System a, by the shape of of isotherms, appertains to irrational systems: the isotherms are curves that are convex toward the composition axis. The curve representing the dependence of temperature coefficient of surface tension, upon the composition, in the

Card 1/3

- 219 -

USSR/Physical Chemistry - Surface Phenomena. Adsorption.

E-13

Chromatography. Ton Exchange

Abs Jour : Referat Zhur - Khimiya, No 2, 1957, 3984

a maximum and a minimum, the maximum is shifted into the region of the less surface active II, while the minimum — into the region of considerable I-content; apparently in this instance a gradual break up of assiciated molecules of I os taking place, and the formation of association complexes of molecules of I and II. In all three systems is observed a negative deviation from Stakhorskiy isotherm; with increasing temperature these deviations decrease,

Card 3/3

- 221 -

VASENKO, Ye.N.; GATALA, Ye.Ye.; ZAKUTSKAYA, M.P.; LEVASHEVA, V.L.; KHAYDUROVA. V.F.; SEMORGUN. O.V.

Liquid-vapor equilibrium in the ternary system acetic anhydrice - acetic acid - acetaldehyde. Dokl. LPI 5 no. 1/2:172-175 163. (MIRA 17:6)

VASENKO, Ye.N.; GATALA, Ye.Ye.; ZAKUTSKAYA, M.P.; KHAYTUROVA, V.F.; SHMORGUN, O.V.

Vapor pressure and boiling point of a ternary mixture of acetic anhydride, acetic acid, and water. Dokl. LPI 5 no. 1/2:161-164 '63. (MIRA 17:6)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858720005-5"

: USSR COUNTRY Q : Farm Animals. CATEGORY Small Horned Cattle. 1959, ito. 25862 : RZhBiol., No. 6, ABS . JOUR. : Vasenko, Ye. P. : Institute of Experimental Biology, AS Kazakh\* AUTHOR IKST. : Data on the Etiology of Fine-Fleeced Sheep of TITLE the Desert Zone. : Tr. In-ta eksperim. biol. AN KazSSR, 1958, 4, ORIG. PUB. 16-39 : Since 1953, an investigation pertaining to the ABSTRACT ecology of sheep belonging to the Priaral!skaya breed group is carried out. One of the characteristics of these sheep manifested in their good adaptability to desert conditions, is expressed by the high degree of their fertility, the normal development of their young and the systematically increasing wool production. The sheep endure a 7-8 [C] higher environmental temperature than fine-fleeced 1/3 CARD: \*SSR. 48

COUNTRY CATECORY

: USSR

ABS. JOUR. : RZhBiol., No. 1959, No.

AUTHOR

INST.

TITLE

ORIG. PUB. :

ABSTRACT

: and feeding conditions of the Priaral'skaya

fine-fleeced sheep, and measures are proposed for raising their productivity under desert conditions. -- M. F. Demina

CARD:

3/3

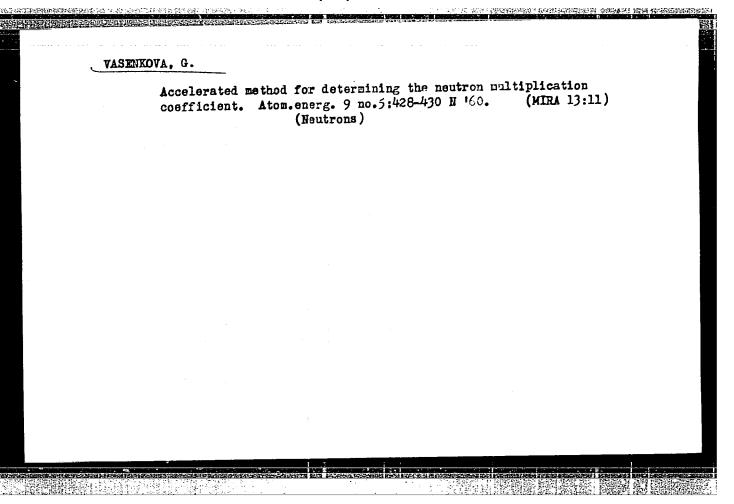
APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858720005-5" DZHALILOV, Khanlar Ibragimovich; VASENKOA, A.V., red.; KHIVRICH, Ye.D., red. izd-va; VDOVINA, V.M., tekhn. red.

[Prospects of the development and expansion of the sources of raw materials for the woodpulp and paper industry] Perspektivy razvitiia i rasshireniia syrtevoi bazy tselliulozno-bungzhnoi promyshlennosti. Moskva, Goslesbumizdat, 1960. 162 p. (MIRA 14:9) (Woodpulp Industry)

NEMIROVSKIY, I.A.; VASENKOV, O.I.; KOMISARENKO, Yu.Ya.

Graphicoanalytical investigation of nonlinear processes in hydraulic systems of machine tools. Stan. i instr. 36 no.9:13-15 S '65.

(MIRA 18:10)



3-2089/64/61/ 203/3/8//01

ACCESSION NRI APAUASSE

AUTHOR: Artamkin, V. H.; Vasenkova, G. V.; Otroshchenko, I. V.; Fedoranko, R. P.

TITLE: Optimum regime for reactor shutdown

SOURCE: Atomnaya energiye, v. 17, no. 3, 1964, 189-193

TOPIC TAGS: Fedorenko optimum control method, reactor optimum control, reactor, reactor poisoning, reactor shutdown

ABSTRACT: A procedure is described for calculating the optimum regime for reactor shutdown employing Fedorenko's approximation mathor if or the numerical solution of a nonlinear optimum control problem. It is assumed that the concentration of fission product is a function of the mean (with respect to fuel volume) neutron flux. The basic parameters determining the optimum reactor control for a given shutdown time are calculated. Also obtained is the relationship between shutdown time and the zenon concentration under the optimum reactor control and scram conditions. Orig. art. has 1 2 figures and 10 formulas.

Card 1/2

ACCESSION NR: AP4045330

ASSOCIATION: none

SUBMITTED: 02Mar64 ATD PRESS: 3115 ENCL: 00

SUB CODE: MP NO REF SCV: 201 OTHER: 023

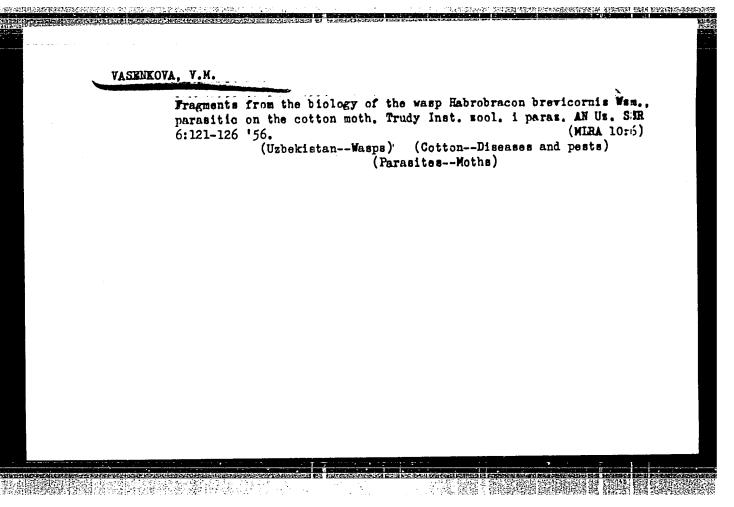
Card 2/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858720005-5"

YASEIKOYA, Y.M.

Analysis of species parasitic on Laphygma exigua Hb. in Uzbekistan. Dokl.AN Uz.SSR no.11:65-67 '56. (MIRA 13:6)

1. Institut zoologii i parazitologii AN UzSSR. Predstavleno akademikom AN UzSSR S.S.Kanashom.
(Uzbekistan--Parasites--Army worms)



YAKHONTOV, V.V.; DAVLETSHINA, A.G.; VASENKOVA, V.M.

Characteristic features of the change in the entomofauna of the Golodnaya Steppe as influenced by its cultivation. Vop. ekol. 7:214-215 '62. (MIRA 16:5)

1. Institut zoologii i parazitologii AN Uzbekskoy SSR, Tashkent. (Golodnaya Steppe--Insects, Injurious and beneficial)

GAGARINA, A.V.; VIIINER, L.M., VASENOVICH, M.I.; SVET-MOLDAVOKAYA, I.A.; KHANINA, M.K.; SVET-MOLDAVSKIY, G.Ya.

Nonencephalitogenic formolized vaccine against tick-borne encephalitis. Vop. virus. 9 no.2:167-169 Mr-Ap 164. (MIRA 17:12)

1. Institut policmiyelita i virusnykh entsefalitov AMN SSSR, Moskva.

## VASCHOVICH, M. I.

Determining on a tiprae culture the content of diphtheria antitoxin in Y-globulins and immune sera. Zhur.mikrobiol., epid. i insun. 42 no.3:92-97 Mr 165. (MIRA 18:6)

1. Gosudarstvennyy kontrol'nyy institut meditsinskikh bioligieheskikh preparatov imeni Tarasevicha.

Vaseriany, 3

WEISZ, P.; GIAZ, E.; KERTAI, P.; VASENSZKY, S.; SCHUIZ, A.; SZENDI, J.

Reflex conditioning in decrease of adrenal vitamin C by adrenal in. Orv. hetil. 93 no. 14:409-410 6 Apr 1952. (CIML 23:3)

1. Doctor for Weisz, Glaz, and Vasensky; Technical Assistant for Schulz and Szendi. 2. Institute of Pathophysiology (Director -- Prof. Dr. Jossef Sos), Budapest Medical University.

VASFNSZKY, Szilard

From the Hungarian for Dr. Kathryn Knowlton
Orvosi Hetilap, vol. 93, No. 44, pp. 1248-1251, Nov 2, 1952

Magas gerinevelo atbagas (Th: 1-2 segm.) hatasa a mellekvesekereg mukodesere.
[Effect of high section of the spinal cord (between the 1st and 2nd theracic segments)
on the function of the suprarenal cortex.]
Uj ACTH titralais eljaras
New ACTH titrating process
by
Drs. Pal (Paul Weisz, Edit (Edith) Glaz and Mr. Szilard Vasenszky.
Technical assistance by Andras (Andrew) Schultz and Janos (John) Szendi.

Translated at the Authorse Theorem and the Pull translation over the ball of the contract of t

WEISZ, P.; GIAZ, E.; VASENSZKY, S.; SCHULTZ, A.; SZENDI, J.

The effect of high transsection of the spinal cord on the function of adrenal cortex; a new ACTH titration method. Orv. hetil. 94 no. 44: 1248-1251 2 Nov 1952. (CIML 24:1)

1. Doctor for Glaz and Vasenssky. 2. Pathophysiology Institute, Budapest Medical University and Third Internal Clinic, Budapest Medical University.

WEISZ, P.; GLAZ, E.; VASENSZKY, S.

Experimental studies on the relation between the central nervous system and the hypophyseal-adrenocortical system. Acta physiol. hung. 4 Suppl:39-41 1953. (CIML 25:1)

1. Of the Pathophysiological Institute and of the Third Internal Clinic. Budapest University.

WEISZ, P.; GIAZ, E.; VASENSZKY, S.; GATI, T.

ACTH titration after section of the spinal cord. Acta med. hung. 4 no.2: 201-205 1953. (CLML 25:1)

ly Technical Assistants: A. Schulz and J. Szendi.

WEISZ, P.; (HAZ, E.; VASENSZKY, S.

Experimental studies on the effect of endogenous ACTH. Orv. hetil, 94 no.43:1194-1196 25 Oct 1953. (CIMI 25:5)

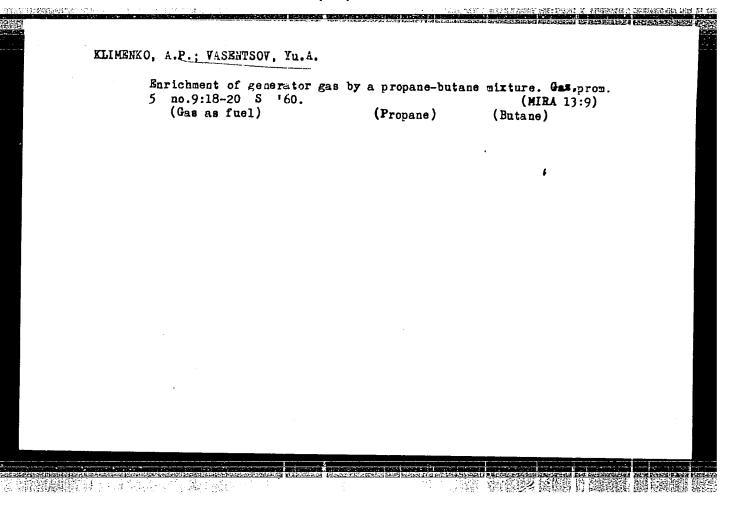
1. Doctor for Weisz and Glaz. 2. Third Internal Clinic (Director — Prof. Dr. Pal Gomori) and Institute of Pathophysiology (Director — Prof. Dr. Jozsef Sos), Budapest Medical University.

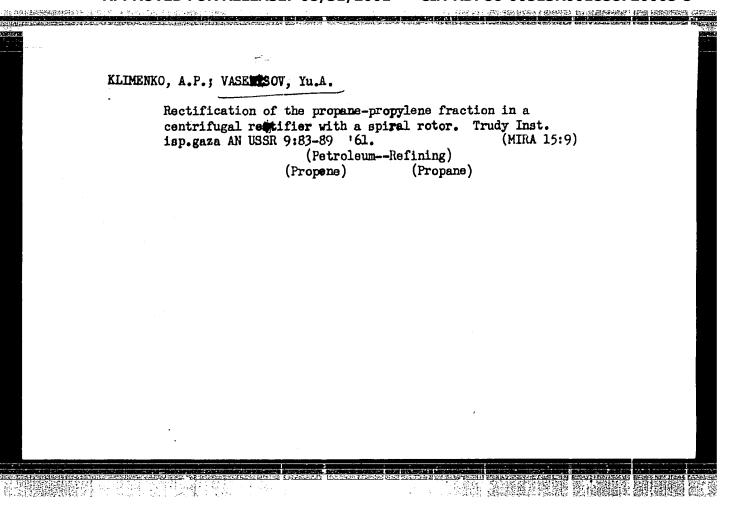
KLIMENKO, Aleksandr Petrovich; PETRUSHENKO, Aleksandr Antonovich; <u>VASENTSOV</u>, <u>Yuriy Andreyevich</u>; <u>VYSOTSKIY</u>, <u>Grigoriy Ivanovich</u>; <u>CHEGLIKOV</u>, A.G., otv.red.; <u>REMENNIK</u>, T.K., red.izd-va; <u>RAKHLINA</u>, N.P., tekhn.red.

[Thermodynamic properties of light hydrocarbons of the paraffin series] Termodinamicheskie svoistva legkikh uglevodorodov parafinovogo riada. Kyiv, Izd-vo Akad.nauk Ukrainskoi SSR, 1960. 95 p. (Akademiia nauk URSR, Kiev. Instytut vykorystannia gazu. Trudy, no.8).

(MIRA 14:12)

(Hydrocarbons--Analysis)





RAFIBEKOV, F.H.; VASERMAN, N.L.

Pattern making for shoe uppers and sole parts of children's sandals manufactured with the stitchdown method. Leh.prom. no.1:29-31 Ja-Mr '63. (MIRA 16:4)

l. Eksperimental'naya fabrika Ukrainskogo nauchno-issledovatellskogo instituta kozhevennoy promyshlennosti.

VASERMAN, YE, B.

VASERMAN, YE. B. "The free oscillations of loaded round elastic arches and rings." Latvian State U. Riga, 1956. (Dissertation for the Degree of Candidate in Technical Science).

So: Knizhnaya letopis', No. 15, 1956. Moscow.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858720005-5"

VISERMON, VE.B.

124-11-13109

Translation from: Referativnyy Zhurnal, Mekhanika, 1957, Nr 11, p 120 (USSR)

Vaserman, Ye B 3 AUTHOR:

The Influence of the Load Distribution on the Free Vibrational TITLE:

Frequency of a Ring, (Vliyaniye povedeniya nagruzki na chastotu

svobodnykh kolebaniy kolitsa.)

V. sb. t. Vopr dinamiki i dinam, prochnosti Nr2PERIODICAL:

Riga, A N LatySSR, 1956, pp 49-71

Investigates two- and three-dimensional vibrations and also the stability of circular rings subjected to a uniformly distributed radial ABSTRACT:

load.

On the basis of Kirchhoff's well-known equations for a thin, curvilinear bar and Klebasch's kinematic relationships, a frequency equation is set up separately for two-dimensional vibrations of the wing in its own plane and for three-dimensional vibrations. In these equations terms appear which depend on the loading and which take account of its distribution during the freely vibratory deformations

of the ring.

Card 1/2

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124-11-13109

计可谓语言语言 阿斯里里

The Influence of the Load Distribution on the Free Vibrational Frequency of a Ring.

(Continued)

Results are obtained for those three or six possible cases which to date had not yet been studied: (1) the load remains normal to the undeformed axis of the ring in two-dimensional vibrations; (2) the load remains directly toward the center of initial curvature during two-dimensional vibrations; (3) the load remains normal to the undeformed axis of the ring during three-dimensional vibrations.

The values of the vibrational frequencies are established in relation to the load distribution.

The values of the critical loading for the ring are found.
A comparative analysis of the characteristics of two- and three-dimensional vibrations of the ring is made in relation to the vibrational mode.

Full and hollow circular sections and square sections are examined.
(D. V. Vaynberg)

Card 2/2

SOV/124-58-4-4517

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr4, p 121 (USSR)

AUTHOR: Vaserman, Ye. B.

TITLE: The Effect of a Load Upon the Frequency of Free In-plane

Vibrations of a Circular Arch (Vliyaniye povedeniya nagruzki

na chastotu svobodnykh ploskikh kolebaniy krugovoy arki)

PERIODICAL: Zinatn. raksti. Latv. univ., Uch. zap. Latv. un-t, 1957.
Vol 10, pp 81-111

ABSTRACT:

The paper analyzes the problem of free vibrations and stability of fixed and two-hinged circular arches compressed by a uniformly distributed radial load. Three cases of load behavior during the process of in-plane deformation of the arch are considered. Exact frequency equations including the normal stresses are set up for the fixed arch; from these, equations are obtained for the critical state. For asymmetrical forms of free vibrations the author applies Bubnov's method. In the same manner he presents a solution to the problem of the frequencies of free vibrations and critical loads for two-hinged arches. In order to simplify the calculations, the frequency equations are transformed so as to contain only real quantities.

Card 1/2

SOV/124-58-4-4517

The Effect of a Load Upon the Frequency (cont.)

The results of the approximate and the exact solutions are compared in numerical examples.

1. Structures--Vibration 2. Mathematics

D. V. Vaynberg

Card 2/2

SOV/124-58-10-11470

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 10, p 110 (USSR)

Vaserman, Ye.B. AUTHOR:

Three-dimensional Vibrations of a Circular Arch Under Various Con-TITLE: ditions of Load Behavior in the Process of Deformation (Prostranst-

vennyye kolebaniya krugovoy arki pri razlichnom povedenii nagruzki

v protsesse deformirovaniya)

PERIODICAL: Uch. zap. Latv. un-t, 1957, Vol 13, pp 7-31

Examination is made of the natural vibrations and the stability of ABSTRACT: the in-plane mode of flexure of circular arches loaded by a uniformly-

distributed radial load. The problem is solved with the usual assumptions of the theory of small elastic deformations (the dimensions of the arch being small relative to the radius of curvature; one of the major axes of inertia lies in the plane of the initial curvature of the arch; the influence of the forces of inertia of rotation and the effect of lateral force are not taken into consideration; the arch axis is not extensible; shifts and strains are low). Three cases of the behavior

of a load in the process of vibration are examined: 1) The load remains normal to the arch axis; 2) the load is parallel to its initial

Card 1/2

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SOV/124-58-10-11470

Three-dimensional Vibrations of a Circular Arch (cont.)

direction; and 3) the load remains directed toward the center of the initial arch axis. The problem is reduced to a sixth-order differential equation with constant coefficients relative to displacements normal to the plane of the arch. An exact solution is found for natural frequencies for symmetrical and antisymmetrical modes of vibration. Critical loadings for static stability are derived as a special case of the problem of dynamics when the vibration frequency is zero. A simpler solution is obtained by the Galerkin method after special assemblage of an approximating function. A comparison of the results of exact and approximate solutions with the solutions of Brown (Brown, F.H., F. Franklin Inst., 1934, Vol 218, Nr 1, pp 41-48) and Federhofer (Federhofer, K., Sitzungsber. Akad. Wiss., Wien, Abt., 1936, Vol 145, Nr 1, pp 29-56), obtained by Rayleigh's method is made. A number of critical remarks are made and corrections offered relative to the article of A.B. Morgayevskiy (Inzhenernyy sb., 1955, Vol 22, pp 26-32, RZhMekh, 1956, Nr 9, abstract 6190). Bibliography: 8 references.

Yu.P. Grigor'yev

Card 2/2

VASERMIN, Ye.D.

25(0) PHASE I BOOK EXPLOITATION SOV/1209

Akademiya nauk Latviyskoy SSR. Institut mashinovedeniya

- Voprosy dinamiki i prochnosti (Pröblems of Dynamics and Strength) Riga, Izd-vo AN Latviyskoy SSR, 1958. 178 p. (Series: Its: Sbornik statey, vyp. 5) 1,500 copies printed.
- Ed.: Vengranovich, A.; Tech. Ed.: Inkis, R.; Editorial Board of Series: Panovko, Ya.G., Doctor of Technical Sciences, Professor (Resp. Ed.); Aynbinder, S.B., Candidate of Technical Sciences, Docent; Kalinin, N.G., Candidate of Technical Sciences, Docent.
- PURPOSE: This book is intended for research engineers and scientists concerned with problems of dynamics and strength of structures.
- COVERAGE: The book is a collection of ten research papers, prepared by members of the Akademiya nauk Latviyskoy SSR (Academy of Sciences of the Latvian SSR), the Latviyskiy gosudarstvenniy universitet (Latvian State University) and the Rizhskoye Krasnoznamennoye vyssheye inzhenerno-aviatsionnoye voennoye uchilishche (Riga Red-Banner Higher Military School for Aeronautical Engineering imeni Card 1/3

Problems of Dynamics (Cont.) SOV/1209

K.E. Voroshilov) dealing with miscellaneous problems in the dynamics of machines, and the strength, stability, and hysteresis of structures. The scope of the articles is indicated by the table of contents below. Each individual report is accompanied by references.

#### TABLE OF CONTENTS:

- Panovko, Ya.G., Gol'tsev, D.I., and Strakhov, G.I. Elementary
  Problems of Structural Hysteresis.
- Kalinin, N.G. Calculation Methods for the Body of All-metal Railroad Passenger Cars. 27
- Strakhov, G.I. Simplest Problems of Dynamic Stability of a Rod with One degree of Freedom Having Transverse Connections. 41
- Gubanova, I.I. Complex cases of Rotation of a Curved Elastic Rod in a Curved Tube. 51

Card 2/3

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Problems of Dynamics (Cont.)	1209	
Putyatin, V.V. Pendulum-type Tors	ional-oscillation Pickup.	<i>6</i> 3
Gol'tsev, D.I. Estimation of Hyst Oscillations With Asymmetrical	eresis Losses in Forced Cycles.	85
Vaserman, Ye.B. Two-dimensional O of Circular Arcs Loaded Hydrost ation of the Variation in Length	atically With Consider-	97
Katayev, I.I. Braking and Blocking Transmissions.	g in Simple Planetary	115
Gol'dfarb, V.M. and Stepanov, A.V. Strained Condition of Laminated	Elastic Constants and Nonhomogeneous Media.	127
Tarnopol'skiy, Yu.M. Bending of Be Cicular Axes on an Elasto-plast:	eams with Straight and ic Basis.	159
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VASERMANS, K.

GENERAL

RERIODICALS: VESTIS, No. 5, 1958

VASERMANS, K. The question of the preparative obtaining of new ganglio-blockaders, pentapyrrolidinium and tetrapiperidinium. In Russian. p. 79

Monthly list of East European Accessions (EMAI) LC. Vol. EmMc. 2, February 1959, Unclass.

VASERMANS, K.

GENERAL

PERIODICALS: VESTIS, No. 5, 1958

Vasermans, k. Structure and properties of some 3, 6-disubstituted pyridazines. In Russian. p. 87

Monthly list of East European Accessions (EEAI) LC, Vol. 8, No. 2, February 1959, Unclass.

LIETSIS, S.Ye., inzh.; VASERNIS, A.I., inzh.

Ways for increasing the duty of the T-16 self-propelled chassis.

Trakt. i sel'khozmash. 33 no.4:4-5 Ap' 163. (MIRA 16:10)

1. Khar'kovskiy traktorosborochnyy zavod.

(Tractors)

**以上的现在分词** 

LIBTSIS, S. Ye., inzh; VASERNIS, A.I., inzh.

"Russian tractors", a manual. Trakt. i sel\*khozmash. no.68
45 Je\*64 (MIRA 17:7)

1. Khar'kovskiy traktorosborochnyy zavod.

LIBTSIS, S.Ye.; VASERRIS, A.I.

Calculating the elements of the plastic bushing of a sleeve bearing.

Trakt. 1 sel\*khoznast. no.9:10-12 5 '61.

(MIRA 17:11)

1. Khar'kovskiy traktorosborochnyy zavod.

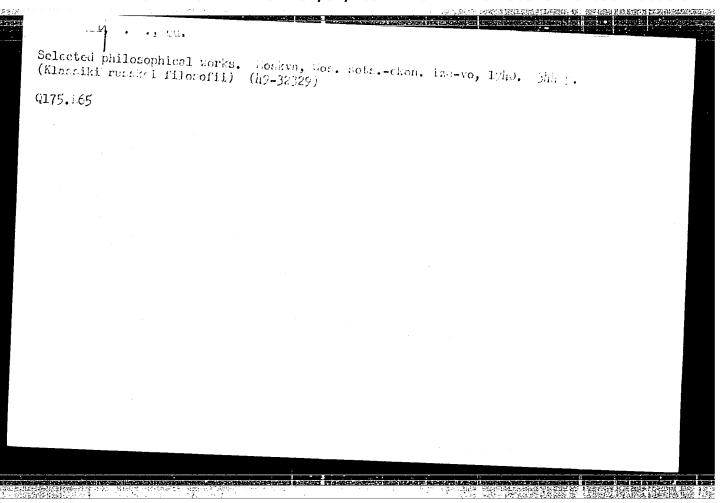
DREVAL', N.V., inzh.; LIBTSIS, S.Ye., inzh.; VASERNIS, A.I., inzh.; SHINDNES, R.M., inzh.; KOSOROTOV, B.V., red.

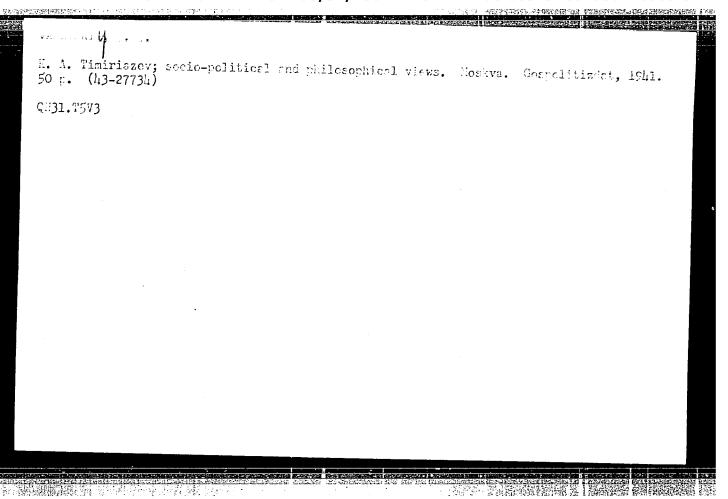
[Construction and operation of the T-16 automotive chassis] Ustroistvo i ekspluatatsiia samokhodnogo shassi T-16. Mo-skva, Kolos, 1965. 190 p. (MIRA 18:7)

1. Khar'kovskiy traktorosborochnyy zavod (for all except Kosorotov).

- VASATSKIU, G. S.  K. A. Timiriazev; socio-political and philoso Lenina selkhoz. akademii im. K.A. Timiriazev	phical views Moskva. Izd. Moskovskoi ordena a. 1940. 48 p.
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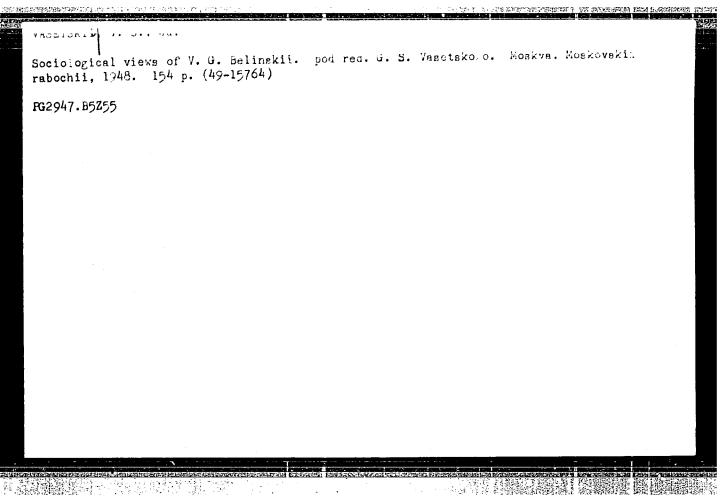
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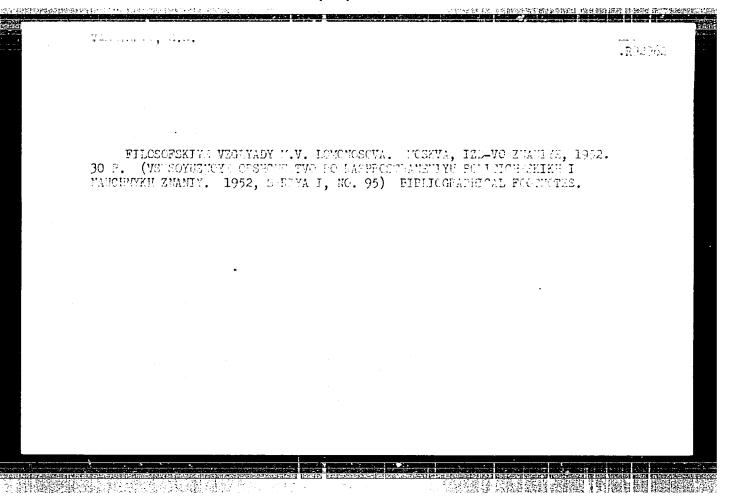


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MECHNIKOV, I.I.; KROTKOV, F.G., glavnyy redaktor; VASETSKIY, Q.S., redaktor; BEKKIN, R.I., redaktor; ANICHROV, N.N., redaktor; THIMNOV, V.M., redaktor; BEKLEMISHEV, V.N., redaktor; KRATEVSKIY, N.A., redaktor; PAYLOYSKIY, Ye.N., redaktor; VYGODCHIKOV, G.V., redaktor; SOBOL', L.I., redaktor; ROTERMEL', R.P., tekhnicheskiy redaktor.

[Collected works published by the Academy] Akademicheskoe sobranie sochinenii. Redaktsionnaia kollegiia: F.G.Krotkov i dr. Moskva, Gos. isd-vo med. lit-ry. Vol. 13, 1954. 242 p. (MLHA 7:11)

(Biology)

MIKULINSKIY, S.R.; VASETSKIY, G.S., red.; SAMSONENKO, L., red.; ULANOVA, L., tekhn.red.

[Selected works by Russian naturalists of the first half of the 19th century] Izbrannye proizvedeniia russkikh estestvoispytatelei pervoi poloviny XIX veka. Moskva, Izd-vo sots.-ekon.lit-ry. 1959. 659 p. (MIRA 12:7) (Science--Collected works)

**於這些問題的**自然的思想的自然可是有可能

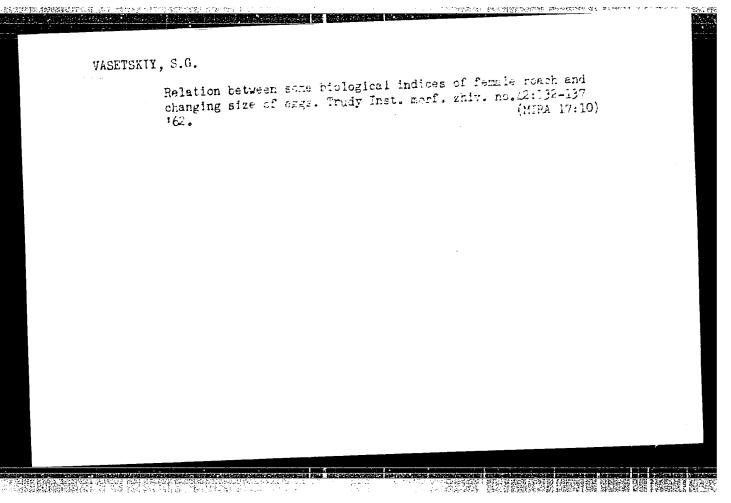
VASETSKIY, S.G.

Characteristics of changes in the size of eggs in running
female roaches. Trudy Inst. morf. zhiv. no.40:254-266 \*62.

(MIRA 16:6)

(Volga delta—Roach(Fish))

(Fishes—Eggs)



CHEPRAKOVA, Yu.I.; VASETSKIY, S.G.

Characteristics of the mature roe of roach (Rutilus rutilus caspicus Jak.) in relation to the nature of the spawning stock. Vop. ikht.

2 no.2:262-274 '62. (MIRA 15:11)

1. Institut morfologii zhivotnykh imeni A.N.Severtsova AN SSSR. (Volga River--Roach (Fish)) (Caspian Sea--Roach (Fish)) (Fishes--Eggs)

ACC NR: AP7001975

SOURCE CODE: GE/0030/66/018/002/0740/0754

AUTHOR: Asche, M.; Sarbej, O. G.; Vasetskii, V. M.

ORG: Institute of Physics, Ukrainian Academy of Sciences, Kiev (Institut fur Physik der Ukrainischen Akademie der Wissenschaften); [Asche] Institute of Physics Technology, German Academy of Sciences, Berlin (Physikalisch-Technisches Institut der Deutschen Akademie der Wissenschaften)

TITLE: Piezoresistance of p germanium

SOURCE: Physica status solidi, v. 18, no. 2, 1966, 749-754

TOPIC TAGS: germanium, p germanium, piezoresistance, germanium crystal, crystal impurity, temperature dependence

ABSTRACT: The article deals with the measurements of piezoresistance of a p-germanium as a function of pressure and impurity concentration at 77 to 300K. The experimental results show a strong dependence of the piezoresistance on both values. The data for low pressures are in good agreement with the linear theory, while at high pressures there is a predominance of quadratic terms. The authors

Card 1/2

ACC NR: AP7001975

thank Professor S. I. Pekar for discussing the study. Orig. art. has: 4 figures. [Authors' abstract] [NT]

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OTH REF: 002/

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L 58875 35 EWT(1)/EWT(m)/T/EWF(t)/EWP(b)/EWA(h) Pz=6/Peb IJF(c) JD/AT ACCESSION NR: AP5017292 UR/0181/65/007/007/2021/2023

AUTHOR: Boychenko, B. L.; Vasetskiy, V. M.

TITLE: Temperature dependence of silicon conductivity in a strong electric field

SOURCE: Fizika tverdogo tela, v. 7, no. 7, 1965, 2021-2023

TOPIC TAGS: silicon, semiconductor, electric conductivity, electric field, electron temperature

ABSTRACT: The temperature dependence of silicon conductivity was investigated using crystals with an electric field directed along axis [111]. Test samples were of n-silicon with specific resistance of 20 ohm cm, with a Hall mobility of 1350 cm<sup>2</sup> volt-1 sec-1, and a life of approximately 3 microseconds. They had the form of rectangular parallelopipeds with dimensions lxlx5 mm and were cut from the middle section of a single crystal. These samples were used to study current density as a function of electric field intensity in the temperature range from 77 to 300°K. The 77° temperature was achieved by submerging the samples in liquid nitrogen. At room temperatures the samples were submerged in transformer oil which was thermostatically controlled. Intermediate temperatures were obtained by placing the crystals

Card 1/2

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into a stream of nitrogen vapor with temperature controlled by means of thermocouples. Measurements were conducted using rectangular pulses with a duration of 0.2 microseconds and a prf of 1 to 50 cps. In each case the prf was varied by a factor of 2-3 to assure that the results were independent of the repetition frequency. The power balance equation was used to compute the variation in electron temperatures as a function of the electric field for various lattice temperatures. It was shown that in the range of fields from 9 kilovolts cm<sup>-1</sup> up the electron temperature increases constantly with a decrease in the lattice temperature in the neighborhood of 77°K. "In conclusion the authors consider it their pleasant duty to thank P. M. Tomchuk and O. G. Sarbey for valuable advice." Orig. art. has: 3 figures.

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 (Mining engeneering--Safety measures)